

S.F.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

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OFFICE OF
PESTICIDES AND TOXIC SUBSTANCES

Memorandum

Subject: 89-LA-01; Harmony (DPX M 6316) for
use on oats; No MRID No.;
DEB No. 4830.

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Thru: Edward Zager, Section Head *EZ*
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To: Robert Forrest, PMT-41
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The Louisiana Commissioner of Agriculture and Forestry has requested a Section 18 emergency exemption for the use of Harmony Herbicide (DPX-M6316) to control wild garlic (Allium vineale) in oat fields.

Harmony (EPA Reg. No. 352-466) is a granular, water dispersible, herbicide containing 75% methyl 3-[[[(4-methoxy-6-methyl-1,3,5-triazin-2-yl)amino]carbonyl]amino]sulfonyl]-2-thiophene-carboxylate as its active ingredient; the product is a registered trademark of E. I. du Pont de Nemours & Co.

Tolerances are established (40 CFR 180.439) for residues of Harmony (DPX-M6316) in or on barley and wheat grain at 0.05 ppm, and barley and wheat straw at 0.1 ppm.

The nature of the metabolism of Harmony in plants and animals is adequately understood. The residue of concern is the parent compound, DPX-M6316 (PP#6F3431, C. Deyrup memo of 6-3-88).

89-LA-01 calls for a single postemergence application of 0.5 to 0.66 oz of Harmony per acre (0.38 to 0.5 oz. a.i.). Treatment should be made in the spring, utilizing ground or aerial spray equipment. Harmony will be applied when wild garlic weeds are 6-12 inches high and when oats are past the 2-leaf stage but before

the boot-stage. Thorough coverage of the garlic weed is required. Use restrictions include: Do not apply more than once to any one crop per growing season; Do not graze or feed forage or hay from treated areas to livestock; and Do not plant any crop other than oats, wheat, or barley for 60 days after application of Harmony.

The State of Louisiana estimates that 40,000 acres of oats will be treated with 1,650 lbs. of Harmony herbicide (1,237.5 lbs. a.i.) during the 1989 season, if this Section 18 is approved.

No residue data were provided with this submission, instead, the State of Louisiana cited residue data previously submitted to the Agency in connection with the established tolerances for wheat and barley grain and hay (PP#6F3431). These data showed no finite residues in wheat and barley straw (ND < 0.05 ppm), and wheat and barley grain (ND < 0.02 ppm), resulting from exaggerated treatment rates up to 8x those proposed by this Section 18 request.

HPLC (Photoconductivity detection) analytical methods (AMR-646-86 and AMR-761-87) described in PP#6F3431 appear adequate for assaying PDX-M6316 in oat grain (ND < 0.02 ppm) and straw (<0.05 ppm) respectively.

Meat, milk, poultry, and eggs

No finite residues of DPX-M6316 were detected in or on wheat and barley (grain and straw) from field trials conducted at exaggerated application rates (up to 8x those proposed in this Section 18 request), therefore, residues are not expected to be transferred to milk, meat, poultry, and eggs.

Conclusions

1. The metabolic nature of Harmony herbicide (PDX-M6316) in plants and animals is adequately understood. The parent compound is the residue of concern.
2. The HPLC (Photoconductivity detection) methods (AMR-646-86 and AMR-761-87) described in PP#6F3431 should be adequate for enforcement purposes.
- 3a. Finite residues of PDX-M6316 are not expected to occur in or on barley and wheat grain (ND < 0.02 ppm), and barley and wheat straw (ND < 0.05 ppm) as a result of this Section 18 request.
- 3b. Finite residues of PDX-M6316 (ND < 0.05 ppm) are not expected to occur in milled oat products as a result of this Section 18 request.

4. Finite residues of PDX-M6316 (ND < 0.05 ppm) are not expected to transfer to meat, milk, poultry, and eggs as a result of this Section 18 request.

5. Reference standards for PDX-M6316 are available from the Pesticide and Industrial Chemical Repository in RTP, N.C.

Recommendation

TOX considerations permitting, we have no objections to the issuance of this Section 18 exemption. An agreement should be made with FDA regarding the legal status of the treated commodity in commerce.

cc:R.F.,S.F.,Circu,Reviewer, SACB (Jaeger), Section 18,PMSD/ISB
RDI:EZ:2/3/89:RDS:2/3/89
TS-769:RCB:FBS:fbs:557-1883:CM#2:RM814:2/3/89